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	Application No.	Applicant(s)
•		, ipplication (c)
Notice of Allowability	10/697,957	WUIDART ET AL.
Notice of Anomability	Examiner	Art Unit
	Viet Q. Nguyen	2827
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. X This communication is responsive to RCE filed on 10/13/20	<u>005</u> .	
2. The allowed claim(s) is/are <u>1-10 and 24-54</u> .		
 Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 	nder 35 U.S.C. § 119(a)-(d) or (f).	
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached		
1) hereto or 2) to Paper No./Mail Date	·	
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the	Office action of
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on the drawi he header according to 37 CFR 1.121	ings in the front (not the back) of (d).
 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. 		
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Attachment(s) 1. ☑∕Notice of References Cited (PTO-892)	5. Notice of Informal I	Patent Application (PTO-152)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary Paper No./Mail Da	
 Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 	8), 7. Examiner's Amend	
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. X Examiner's Statem	ent of Reasons for Allowance
c. Siongical material	9.	

VIET Q. NGUYEN

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DETAILED ACTION

1. Claims 1-10 (old) and 24-54 (new) are present for examination.

Claims **1-10** and **24-54** are found allowable over the prior arts of record and field of search for the reasons as stated below:

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

The prior arts fail to teach or fairly suggest a memory cell, with at least two detectable states, which includes a first branch in series between first and second terminals of an applied read voltage, and such first branch also comprises of a pre-read stage with two switchable resistors having different values of a predetermined first difference, and such first branch further comprises of a programming stage (in series with such pre-read stage) that includes a polysilicon resistor coupled to a programming circuit that is capable of programming such polysilicon programming resistor with a change in resistance value.

The main advantage of this invention over prior art teaching is that an unprogrammed state (after manufacturing) of the memory cell can be made out from two programmed states and, more generally, such cell which has been programmed to any state after its manufacturing can be made out (through controlled switching).

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Viet Q. Nguyen whose telephone number is (571) 272-

1788. The examiner can normally be reached on 7am-6pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hoai Ho can be reached on (571) 272-1777. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free).

Viet Q Nguyen

V- Kyveyew Primary Examiner

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VIET Q. NGUYEN PRIMARY EXAMINER